Textbook: *Physics* by Giancoli				***SP211 Course Outline****		***Fall 2001***
LESSON	SCHEDULE	TEXT		TOPIC	LAB (Lab Manual)	MATH
NUMBER		CH	SEC			REVIEW**
1	Week 1			Administration, Diagnostic Exams, etc.	Week 1:	
2	(20-24 Aug.)	1	1-6	Measurement, Units, Estimating	Introduction to	6.5
3		2	1-4	1D Velocity and Acceleration	Laboratory	2.1
4	Week 2		5-7	1D Constant Acceleration		2.6
5	(27-31 Aug.)	3	1-5	Vectors	Week 2:	9.2
6			6-8	Projectile Motion	1D Kinematics	10.4
	Week 3			*Labor Day*		
7	(3-7 Sept.)		9-10	Circular Motion, Relative Velocity	Week 3:	10.4
8		4	1-5	Forces and Newton's Laws	2D Kinematics	6.5
9	Week 4		6	Weight, Normal Force and Tension		9.2
10	(10-14 Sept.)		7-8	Free-Body Diagrams	Week 4: Newton's	
11		5	1	Friction	First & Second Laws	
12	Week 5		2-3	Circular Motion (Dynamics)		10.4
13	(16-21 Sept.)	6	1-3	Newton's Law of Universal Gravitation	Week 5: Newton's	6.5
14	*Lecture demonstration on Friday, 21 Sept. in Michelson 117*				Centripetal Force	
15	Week 6		4-5	Kepler's Laws and Orbital Motion		10.4
17	(23-28 Sept.)			Time reserved for exam. Actual date TBA	Week 6: TBA	
18		7	1-3	Work		6.5
19	Week 7		4	Kinetic Energy	Week 7:	13.3
	(1-5 Oct.)			*Six Week Grades Due*	Work and Energy	
20		8	1-2	Potential Energy		13.3
21			3-6	Conservation of Mechanical Energy		13.3
	Week 8			*Columbus Day*	Week 8: TBA	
22	(8-12 Oct.)		7-8	Escape Velocity, Power		6.5
23		9	1-2	Linear Momentum	Week 9:	
24	Week 9		3	Collisions and Impulse	1D Collisions	
25	(15-19 Oct.)		4-5	Elastic Collisions		
26			6-7	Inelastic Collisions	Week 10:	
27	Week 10		8-9	Center of Mass	2D Collisions and	6.5, 12.5, 12.7
28	(22-26 Oct.)			Time reserved for exam. Actual date TBA	Center of Mass	
29		10	1-3	Rotational Kinematics		10.4
30	Week 11		4-5	Torque	Week 11:	9.4
31	(29 Oct.-2 Nov.)		6-7	Rotational Dynamics	Rotational	10.4
32	*Lecture demonstration on Friday, 2 Nov. in Michelson 117*				Kinematics and	
33	Week 12		9	Conservation of Angular Momentum	Dynamics	10.4
	(5-9 Nov.)			*Twelve-week Grades Due*		
34		13	1-4	Pressure	Week 12: TBA	6.5
35			6	Buoyancy and Archimedes' Principle		
	Week 13			*Veteran's Day*	Week 13:	
36	(12-16 Nov.)		7-9	Bernoulli's Equation	Simple Harmonic	
37		14	1-3,5	Oscillations	Motion	6.5 (Hooke's
38	Week 14		7,8	Damped and Forced Oscillations		Law)
39	(19-23 Nov.)	15	1-2,4	Waves	Week 14: TBA	
				Thanksgiving		
40	Week 15		6-9	Reflection and Transmission, Resonance	Week 15:	
41	(26-30 Nov.)	16	4,6	Guitars and Organ Pipes, Beats	Standing Waves	
42	*Lecture demonstration on Friday, 30 Nov. in Michelson 117*				on a String	
	1 Dec.			Army/Navy Game		
43	Week 16		7	Doppler Effect		
44	(3-5 Dec.)			Review		
*The representative problems for the course are the alternate odd problems in the text e.g. 3, 7, 11, …						
**MATH REVIEW refers to the text Calculus: Concepts and Context by J. Stewart e.g. 6.5 refers to chapter 6, section 5.						